

## ABSTRACT

The present invention provides a promoter for ATP release from erythrocytes, comprising a substance which stabilizes the structure of hemoglobin in erythrocytes in the T-state; a method of releasing ATP from erythrocytes using the promoter; an inhibitor against  
5 ATP release from erythrocytes, comprising a substance which stabilizes the structure of hemoglobin in erythrocytes in the R-state; and a method of inhibiting ATP release from erythrocytes using the inhibitor.